

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002/RWE/GERAPPLICATION NO.
09/028,514APPLICANT
Gorfien *et al.*FILING DATE
February 23, 1998GROUP
1643
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
DKW	AA1	4,673,649	06/16/1987	Boyce	435	240	07/15/1983
DKW	AB1	4,767,704	08/30/1988	Cleveland	435	68	10/07/1983
DKW	AC1	4,927,762	05/22/1990	Darfler	435	240.31	11/30/1988
DKW	AD1	4,940,666	07/10/1990	Boyce	435	240.2	12/09/1986
DKW	AE1	4,959,319	09/25/1990	Skelnik	435	240.2	02/17/1989
DKW	AF1	5,024,947	06/18/1991	Inlow	435	240.31	07/24/1987
DKW	AG1	5,045,454	09/03/1991	Bertheussen	435	29	02/23/1990
DKW	AH1	5,063,157	11/05/1991	Stockinger	435	240.2	01/11/1989
DKW	AI1	5,089,397	02/18/1992	Kushner	435	69.1	06/14/1989
DKW	AJ1	5,122,469	06/16/1992	Mather	435	240.2	10/03/1990
DKW	AK1	5,166,066	11/24/1992	Carter	435	240.2	07/11/1991

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
DKW	AL1	WO 86/04290	08/28/1986	WIPO	—	—	Yes No
DKW	AM1	EP 0 441 695 B1	08/14/1991	Europe	—	—	Yes No
DKW	AN1	WO 92/05246	04/02/1992	WIPO	—	—	Yes No
DKW	AO1	0 481 791 A2	04/22/1992	Europe	—	—	Yes No
DKW	AP1	WO 96/14395	05/17/1996	WIPO	—	—	Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

DKW	AR	1	"Serum-Free Media, Method for Culturing Animal Cells, and Process for Producing Physiologically Active Substances," <i>PCT Gazette No. 01/1998</i> , p. 275 (January 8, 1998)
DKW	AS	1	JRH Biosciences Catalog No. 14602, 8 pages (1993)
DKW	AT	1	Battista, P.J. <i>et al.</i> , "Serum-free media for the culture of Chinese hamster ovary cells," <i>American Biotechnology Laboratory</i> 12:64-68 (April 1994)

EXAMINER

Derek K. White

DATE CONSIDERED

12-06-99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002/RWE/GERAPPLICATION NO.
09/028,514APPLICANT
Gorfien *et al.*FILING DATE
February 23, 1998GROUP
1643

1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>JKW</i>	AA2	5,316,938	05/31/1994	Keen	435	240.31	12/18/1992
<i>JKW</i>	AB2	5,318,898	06/07/1994	Israel	435	69.1	04/02/1991
<i>JKW</i>	AC2	5,342,777	08/30/1994	Cole	435	240.31	03/03/1992
<i>JKW</i>	AD2	5,378,612	01/03/1995	Nakashima	435	69.6	12/28/1992
<i>JKW</i>	AE2	5,405,772	04/11/1995	Ponting	435	240.31	06/18/1993
<i>JKW</i>	AF2	5,422,250	06/06/1995	Mignot	435	69.6	11/03/1992
<i>JKW</i>	AG2	5,443,968	08/22/1995	Takazawa	435	70.3	04/30/1993
<i>JKW</i>	AH2	5,474,931	12/12/1995	DiSorbo	435	240.31	09/21/1993
<i>JKW</i>	AI2	5,516,654	05/14/1996	Israel	435	69.1	01/27/1994
<i>JKW</i>	AJ2	5,573,937	11/12/1996	Shimoto	435	240.1	01/09/1995
<i>JKW</i>	AK2	5,576,194	11/19/1996	Chan	435	69.6	10/01/1993

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
<i>JKW</i>	AL2	WO 96/39487	12/12/1996	WIPO	—	—	Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>JKW</i>	AR	2	Bebbington, C.R., "The use of vectors based on gene amplification for the expression of cloned genes in mammalian cells," <i>DNA Cloning Volume III. A Practical Approach</i> , D.M. Glover, ed., IRL Press, publ., pp. 163-188 (1987)
<i>JKW</i>	AS	2	Berg, D.T. <i>et al.</i> , "High-Level Expression of Secreted Proteins from Cells Adapted to Serum-Free Suspension Culture," <i>BioTechniques</i> 14:972-978 (1993)
<i>JKW</i>	AT	2	Chaproniere-Rickenberg, D.M. & Webber, M.M., "Zinc Levels in Zinc-Stabilized Insulin are Inhibitory to the Growth of Cells in Vitro," <i>In Vitro</i> 19:373-375 (May 1983)

EXAMINER

John H. Warr

DATE CONSIDERED

12-6-99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002/RWE/GERAPPLICATION NO.
09/028,514APPLICANT
Gorfien *et al.*FILING DATE
February 23, 1998GROUP
1643

1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>Skw</i>	AA3	5,631,159	05/20/1997	Marshall	435	383	09/22/1993
<i>Skw</i>	AB3	5,633,162	05/27/1997	Keen	435	384	03/04/1994
<i>Skw</i>	AC3	5,641,647	06/24/1997	Fischer	435	69.1	08/24/1993
<i>Skw</i>	AD3	5,707,832	01/13/1998	Mignot	435	69.6	02/07/1995
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>Skw</i>	AR	<u>3</u>	Freshney, R.I., "Culture of Animal Cells," <i>A Manual of Basic Technique</i> , Alan R. Liss, Inc., publ., New York, pp. 80-81 (1987)
<i>Skw</i>	AS	<u>3</u>	Garnier, A. <i>et al.</i> , "Scale-up of the adenovirus expression system for the production of recombinant protein in human 293S cells," <i>Cytotechnology</i> 15:145-155 (1994)
<i>Skw</i>	AT	<u>3</u>	Gramer, M.J. and Goochee, C.F., "Gycosidase Activities in Chinese Hamster Ovary Cell Lysate and Cell Culture Supernatant," <i>Biotechnol. Prog.</i> 9:366-373 (1993)

EXAMINER

John F. Wain

DATE CONSIDERED

12-6-99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>	ATTY. DOCKET NO. 0942.4110002/RWE/GER	APPLICATION NO. 09/028,514
	APPLICANT Gorfien <i>et al.</i>	
	FILING DATE February 23, 1998	GROUP 1653 <i>1657</i>

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)




<i>Skw</i>	AR	<u>4</u>	Gramer, M.J. and Goochee, C.F., "Glycosidase Activities of the 293 and NS0 Cell Lines, and of an Antibody-Producing Hybridoma Cell Line," <i>Biotechnology and Bioengineering</i> 43(5):423-428 (March 1994)
<i>Skw</i>	AS	<u>4</u>	Gramer, M.J. <i>et al.</i> , "Removal of Sialic Acid from a Glycoprotein in CHO Cell Culture Supernatant by Action of an Extracellular CHO Cell Sialidase," <i>Biotechnology</i> 13:692-698 (July 1995)
<i>Skw</i>	AT	<u>4</u>	Hall, C.V. <i>et al.</i> , "Expression and Regulation of <i>Escherichia coli lacZ</i> Gene Fusions in Mammalian Cells," <i>Journal of Molecular and Applied Genetics</i> 2(1):101-109 (1983)

EXAMINER <i>Deborah K. Warr</i>	DATE CONSIDERED <i>12-6-99</i>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.4110002/RWE/GER	APPLICATION NO. 09/028,514
	APPLICANT Gorfien et al.	
	FILING DATE February 23, 1998	GROUP 1643 1657

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	5	Ham, R.G., "Clonal Growth of Mammalian Cells in a Chemically Defined, Synthetic Medium," <i>Proc. N.A.S.</i> 53:288-293 (February 1965)
	AS	5	Ham, R.G., "Formulation of Basal Nutrient Media," <i>Methods for Preparation of Media, Supplements, and Substrata for Serum-Free Animal Cell Culture</i> , Alan R. Liss, Inc., publ., New York, pp. 3-21 (1984)
	AT	5	Hamilton, W.G. and Ham, R.G., "Clonal Growth of Chinese Hamster Cell Lines in Protein-Free Media," <i>In Vitro</i> 13:537-547 (September 1977)

EXAMINER 	DATE CONSIDERED 12-6-99
---	----------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
0942.4110002/RWE/GERAPPLICATION NO.
09/028,514APPLICANT
Gorfien *et al.*FILING DATE
February 23, 1998GROUP
1643

1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>Staw</i>	AR	<u>6</u>	Kao, F-T. and Puck, T.T., "Genetics of Somatic Mammalian Cells, VII. Induction and Isolation of Nutritional Mutants in Chinese Hamster Cells," <i>Proc. N.A.S.</i> 60:1275-1281 (August 1968)
<i>Staw</i>	AS	<u>6</u>	Kyung, Y-S. <i>et al.</i> , "High density culture of mammalian cells with dynamic perfusion based on on-line oxygen uptake rate measurements," <i>Cytotechnology</i> 14:183-190 (1994)
<i>Staw</i>	AT	<u>6</u>	Lambert, K.J. and Birch, J.R., "Cell Growth Media," <i>Animal Cell Biotechnology</i> , Volume 1, R.E. Spier and J.B. Griffiths, eds. Academic Press, publ., pp. 85-122 (1985)

EXAMINER

John K. Warr

DATE CONSIDERED

12-6-99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

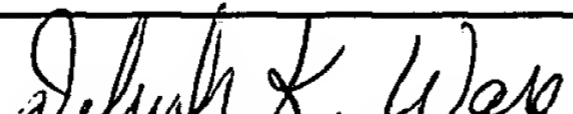
FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>	ATTY. DOCKET NO. 0942.4110002/RWE/GER	APPLICATION NO. 09/028,514
	APPLICANT Gorfien et al.	
	FILING DATE February 23, 1998	GROUP 1643 1657

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AF						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Stu	AR	Z	Lao, M-S. et al., "Degradative activities in a recombinant chinese hamster ovary cell culture," <i>Cytotechnology</i> 22:43-52 (December 1996)
Stu	AS	Z	Le Gros, G.S. et al., "The Effects of Sodium Butyrate on Lymphokine Production," <i>Lymphokine Research</i> 4:221-227 (1985)
Stu	AT	Z	Maurer, H.R., "Towards Chemically-defined, Serum-free Media for Mammalian Cell Culture," <i>Animal Cell Culture. a practical approach</i> , R.I. Freshney, ed., IRL Press, Oxford, pp. 13-31 (1986)

EXAMINER		DATE CONSIDERED	12-6-99
----------	--	-----------------	---------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>	ATTY. DOCKET NO. 0942.4110002/RWE/GER	APPLICATION NO. 09/028,514
	APPLICANT Gorfien et al.	
	FILING DATE February 23, 1998	GROUP 1643 1651

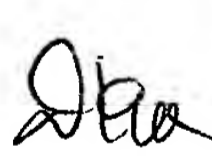


U.S. PATENT DOCUMENTS

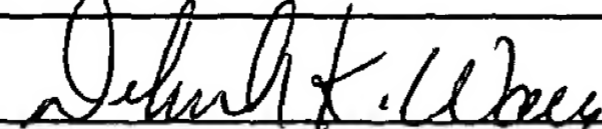
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	8	Peshwa, M. et al., "Cultivation of Mammalian Cells as Aggregates in Bioreactors: Effect of Calcium Concentration on Spatial Distribution of Viability," <i>Biotechnology and Bioengineering</i> 41:179-187 (1993)
	AS	8	Subramani, S. et al., "Expression of the Mouse Dihydrofolate Reductase Complementary Deoxyribonucleic Acid in Simian Virus 40 Vectors," <i>Molecular and Cellular Biology</i> 1:854-864 (September 1981)
	AT	8	Wang, J-W. et al., "Establishment of Three Adenovirus Packaging Cell Lines," <i>Cancer Gene Therapy</i> 3(6):S24 (November 1996)

EXAMINER		DATE CONSIDERED	12-06-99
----------	--	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.4110002/RWE/GER	APPLICATION NO. 09/028,514
	APPLICANT Gorfien et al.	
	FILING DATE February 23, 1998	GROUP 1643 / 1657

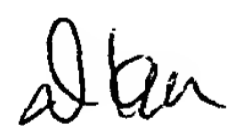


U.S. PATENT DOCUMENTS

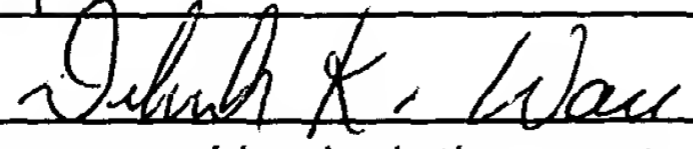
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	2	Waymouth, C., "Osmolality of Mammalian Blood and of Media for Culture of Mammalian Cells," <i>In Vitro</i> 6:109-127 (September-October 1970)
	AS	2	Waymouth, C., "Preparation and Use of Serum-Free Culture Media," <i>Methods for Preparation of media, Supplements, and Substrata for Serum-Free Animal Cell Culture</i> , D.W. Barnes et al., eds., Alan R. Liss, Inc., publ., New York, pp. 23-68 (1984)
	AT	2	Waymouth, C., "Construction and Use of Synthetic Media," <i>Cells and Tissues in Culture. Methods. Biology and Physiology</i> , Volume 1, Edwin N. Willmer, ed., Academic Press, publ., pp. 99-142 (1965)

EXAMINER		DATE CONSIDERED	12-6-99
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.			

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
0942.4110002/RWE/GERAPPLICATION NO.
09/028,514APPLICANT
Gorfien et al.FILING DATE
February 23, 1998GROUP
1643

/651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

SKW	AR	<u>10</u>	Werner, R.G. and Noé, W., "Mammalian Cell Cultures, Part I: Characterization, morphology and metabolism," <i>Arzneim.-Forsch./Drug Res.</i> 43 (II), Nr. 10, pp. 1134-1139 (1993)
SKW	AS	<u>10</u>	Zang, M. et al., "Production of Recombinant Proteins in Chinese Hamster Ovary Cells Using a Protein-Free Cell Culture Medium," <i>Biotechnology</i> 13:389-392 (April 1995)
SKW	AT	<u>10</u>	Unverified English translation of WO 96/14395 (WO 96/14395 published on May 17, 1996)

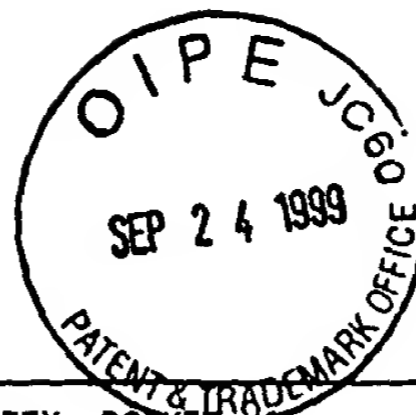
EXAMINER

Jelinski K. W.

DATE CONSIDERED

12-6-99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien et al.FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
DK	AE3	4,786,599	11/22/1988	Chessebeuf et al.	435	240.31	03/23/1984
DK	AF3	5,219,752	06/15/1993	Takazawa et al.	435	240.25	07/15/1991
DK	AG3	5,232,848	08/03/1993	Wolfe et al.	435	240.31	11/16/1989
DK	AH3	5,323,848	06/28/1994	Naty et al.	165	149	04/22/1993
DK	AI3	5,393,558	02/28/1995	Allison et al.	427	126.2	06/07/1993
DK	AJ3	5,407,669	04/18/1995	Lindstrom et al.	424	78.04	03/04/1992
DK	AK3	5,599,705	02/04/1997	Cameron, R.B.	435	378	11/16/1993

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
DK	AM2	GB 901,673	07/25/1962	Great Britain	—	—	Yes No
DK	AN2	JP 2-49579	02/19/1990	Japan	—	—	Yes X No
DK	A02	WO 97/34999	09/25/1997	WIPO	—	—	Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

DK	AR	11	Dialog File 351, Derwent WPI, Accession No. 90-096513, English language abstract of Japanese Patent No. 2-049579
DK	AS	11	Barritault, D., et al., "Is There a Ubiquitous Growth Factor in the Eye?," <i>Differentiation</i> 18:29-42 (1981)
DK	AT	11	Boyce, S.T., and Ham, R.G., "Calcium-Regulated Differentiation of Normal Human Epidermal Keratinocytes in Chemically Defined Clonal Culture and Serum-Free Serial Culture," <i>J. Invest. Dermatol.</i> 81:33S-40S (1983)

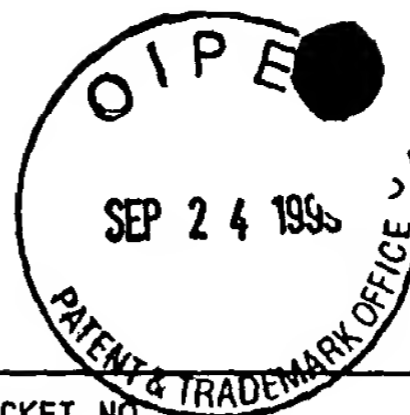
EXAMINER

Deluk Wau

DATE CONSIDERED

12-8-99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien et al.FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
Skw	AA4	5,728,580	03/17/1998	Shuler et al.	435	348	02/20/1996
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

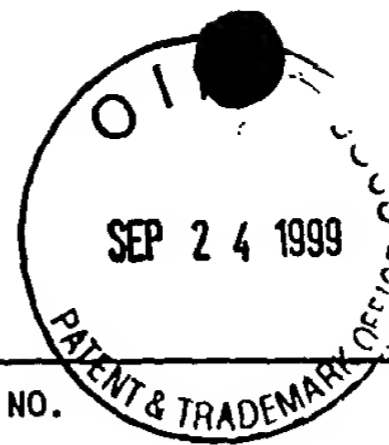
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Skw	AR	12	Cohen, S., "Isolation of a Mouse Submaxillary Gland Protein Accelerating Incisor Eruption and Eyelid Opening in the New-born Animal," <i>J. Biol. Chem.</i> 237:1555-1562 (1962)
Skw	AS	12	Coleman, W.H., and Roberts, W.K., "Inhibitors of Animal Cell-Free Protein Synthesis From Grains," <i>Biochim. et Biophys. Acta</i> 696:239-244 (1982)
Skw	AT	12	Daley, J.P., and Epstein, D.A., "Growth of Human Epidermal Keratinocytes in Keratinocyte Serum-free Medium," <i>Focus</i> 12:68-71 (1990)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien et al.FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

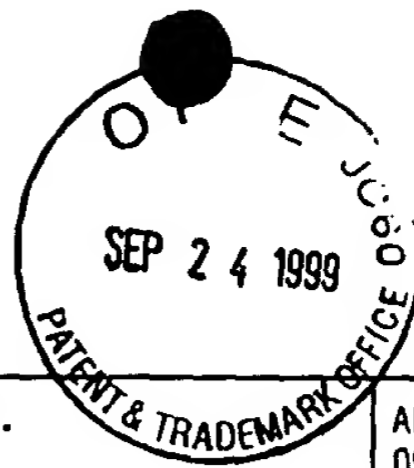
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

See	AR	13	Freshney, R.I., CULTURE OF ANIMAL CELLS. A Manual of Basic Technique, 2nd ed., Freshney, R.I., ed., Alan R. Liss, Inc., New York, NY, pp. 80-81 (1987)
See	AS	13	Freshney, R.I., CULTURE OF ANIMAL CELLS. A Manual of Basic Technique, Freshney, R.I., ed., Alan R. Liss, Inc., New York, NY, pp. 123-125 (1983)
See	AT	13	Freshney, R.I., CULTURE OF ANIMAL CELLS. A Manual of Basic Technique, Freshney, R.I., ed., Alan R. Liss, Inc., New York, NY, pp. 119-128 (1983)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 <u>FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</u>	ATTY. DOCKET NO. 0942.4110002	APPLICATION NO. 09/028,514
	APPLICANT Gorfien <i>et al.</i>	
	FILING DATE February 23, 1998	GROUP 1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

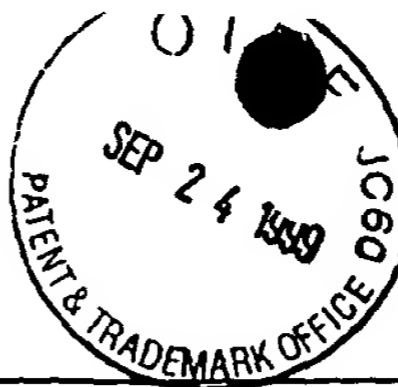
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>Skw</i>	AR	<u>14</u>	Freshney, R.I., "Chapter 1. Introduction," in <i>Culture of Epithelial Cells</i> , Freshney, R.I., ed., Wiley-Liss, Pub., New York, NY, pp. 1-23 (1992)
<i>Skw</i>	AS	<u>14</u>	Gilchrest, B.A., <i>et al.</i> , "Characterization and Partial Purification of Keratinocyte Growth Factor From the Hypothalamus," <i>J. Cell. Physiol.</i> 120:377-383 (1984)
<i>Skw</i>	AT	<u>14</u>	Gorfien, S.F., <i>et al.</i> , "Recombinant Protein Production by CHO Cells Cultured in a Chemically Defined Medium," poster presented at the Japanese Association for Animal Cell Technology (JAAC), 1996, Yokohama, Japan (September 1996)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien *et al.*FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

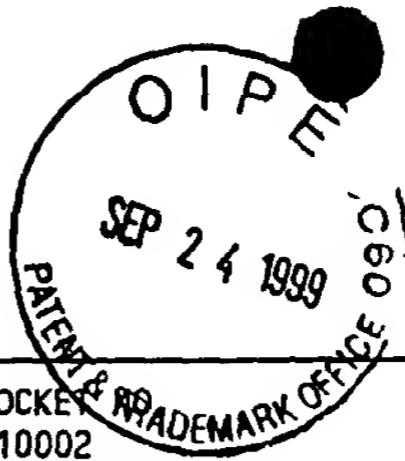
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SK</i>	AR	15	Gorfien, S.F., <i>et al.</i> , "Recombinant Protein Production by CHO Cells Cultured in a Chemically Defined Medium," <i>Animal Cell Technology: Basic and Applied Aspects</i> 9:247-252 (January 1998)
<i>SK</i>	AS	15	Gospodarowicz, D., "Preparations and Uses of Lipoproteins to Culture Normal Diploid and Tumor Cells Under Serum-Free Conditions," in <i>Methods for Preparation of Media, Supplements, and Substrata for Serum-Free Animal Cell Culture</i> , Barns, D.W., <i>et al.</i> , eds., Alan R. Liss, Inc., New York, NY, pp. 69-86 (1984)
<i>SK</i>	AT	15	Keay, L., "Autoclavable Low Cost Serum-Free Cell Culture Media. The Growth of L Cells and BHK Cells on Peptones," <i>Biotechnol. Bioengin.</i> 17:745-764 (1975)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.4110002	APPLICATION NO. 09/028,514
	APPLICANT Gorfien et al.	
	FILING DATE February 23, 1998	GROUP 1651

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
<i>DK</i>	AR	<u>16</u>	Konno, Y., et al., "Effect of Zinc on In Vitro Cell Growth Using Serum-Free Culture Media," <i>Cell Struct. Func.</i> 4(4):371 (1979)
<i>DK</i>	AS	<u>16</u>	Lasfargues, E.Y., et al., "A Serum Substitute That Can Support the Continuous Growth of Mammary Tumor Cells," <i>In Vitro</i> 8:494-500 (1973)
<i>DK</i>	AT	<u>16</u>	Maciag, T., et al., "An endothelial cell growth factor from bovine hypothalamus: Identification and partial characterization," <i>Proc. Natl. Acad. Sci. USA</i> 76:5674-5678 (1979)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien *et al.*FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

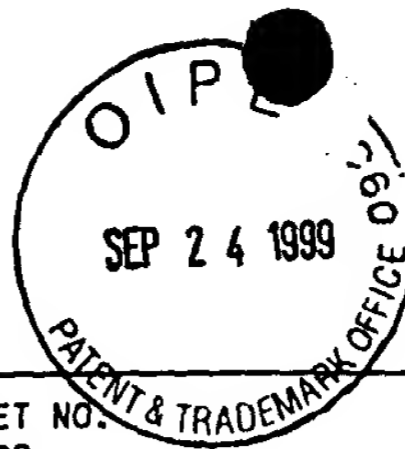
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>Da</i>	AR	17	Maciag, T., <i>et al.</i> , "An Endocrine Approach to the Control of Epidermal Growth: Serum-Free Cultivation of Human Keratinocytes," <i>Science</i> 211:1452-1454 (1981)
<i>Da</i>	AS	17	Peehl, D.M. and Ham, R.G., "Growth and Differentiation of Human Keratinocytes Without a Feeder Layer or Conditioned Medium," <i>In Vitro</i> 16(6):516-525 (1980)
<i>Da</i>	AT	17	Pirisi, L., <i>et al.</i> , "Transformation of Human Fibroblasts and Keratinocytes with Human Papillomavirus Type 16 DNA," <i>J. Virol.</i> 61:1061-1066 (1987)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien et al.FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

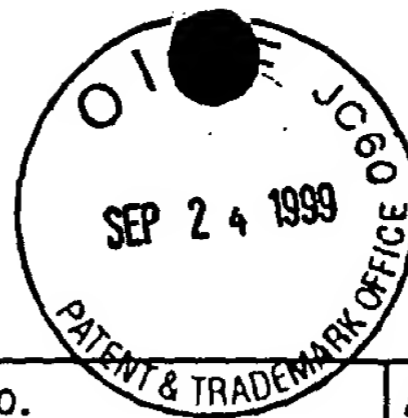
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>AB</i>	AR	<u>18</u>	Pittelkow, M.R., and Scott, R.E., "New Techniques for the In Vitro Culture of Human Skin Keratinocytes and Perspectives on Their Use for Grafting of Patients With Extensive Burns," <i>Mayo Clin. Proc.</i> 61:771-777 (1986)
<i>AS</i>	AS	<u>18</u>	Schlaeger, E.-J., "The protein hydrolysate, Primatone RL, is a cost-effective multiple growth promoter of mammalian cell culture in serum-containing and serum-free media and displays anti-apoptosis properties," <i>J. Immunol. Meth.</i> 194:191-199 (August 1996)
<i>AT</i>	AT	<u>18</u>	Shiloach, J. et al., "Continuous Production of the Extracellular Domain of Recombinant Human Ca ²⁺ Receptor from HEK 293 Cells using Novel Serum Free Medium," in <i>Animal Cell Technology</i> , M. Carrondo, et al., eds., Kluwer Academic Publishers, Netherlands, pp. 535-540 (December 1996)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.4110002	APPLICATION NO. 09/028,514
	APPLICANT Gorfien <i>et al.</i>	
	FILING DATE February 23, 1998	GROUP 1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

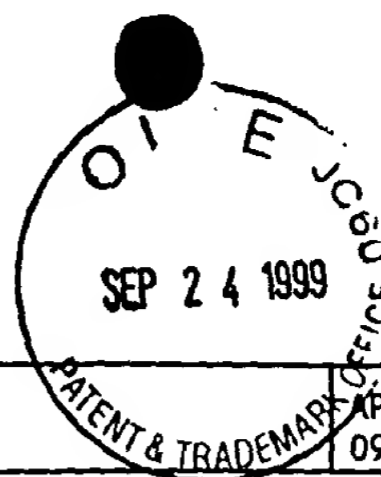
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Shu	AR	19	Shiple, G.D., and Pittelkow, M.R., "Control of Growth and Differentiation In Vitro of Human Keratinocytes Cultured in Serum-free Medium," <i>Arch. Dermatol.</i> 123:1541A-1544A (1987)
Shu	AS	19	Shiple, G.D., <i>et al.</i> , "Growth of Normal Human Keratinocytes and Fibroblasts in Serum-Free Medium Is Stimulated by Acidic and Basic Fibroblast Growth Factor," <i>J. Cell. Physiol.</i> 138:511-518 (1989)
Shu	AT	19	Letter of November 30, 1998 from counsel at Eli Lilly and Company to counsel at Life Technologies, Inc.

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien *et al.*FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>Stark</i>	AR	<u>20</u>	Stark, D.H., "The Cultivation of Human Kidney Epithelial Cells in Aggregate Culture For the Production of Recombinant Protein C," Ph.D. Thesis, Purdue University (1994)
<i>Tilkins</i>	AS	<u>20</u>	Tilkins, M.L., <i>et al.</i> , "Recombinant Protein Production by CHO Cells Cultured in Protein-Free and Serum-Free Media," poster presented at the Cell Culture Engineering V Meeting, San Diego, CA (February 1996)
<i>Valle</i>	AT	<u>20</u>	Valle, M.A., <i>et al.</i> , "Evaluation of Porous Microcarriers in Fluidized Bed Reactor for Protein Production by HEK 293 Cells," in <i>New Developments and New Applications in Animal Cell Technology</i> , O.-W. Merten, <i>et al.</i> , eds., Kluwer Academic Publishers, Netherlands, pp. 381-384 (July 1998)

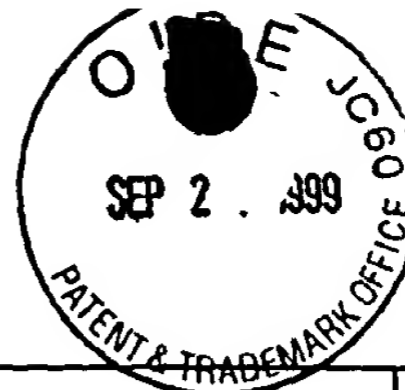
EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 <u>FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</u>		ATTY. DOCKET NO. 0942.4110002		APPLICATION NO. 09/028,514			
		APPLICANT Gorfien <i>et al.</i>					
		FILING DATE February 23, 1998		GROUP 1651			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
Jeu	AR	21	Wang, J.-W., <i>et al.</i> , "Establishment of Three Adenovirus Packaging Cell Lines," <i>Conf. Suppl. Cancer Gene Ther.</i> 3:S24, Abstract No. P-53 (November 1996)				
Jeu	AS	21	Waymouth, C., "Preparation and Use of Serum-Free Culture Media," in <i>Methods for Preparation of Media. Supplements. and Substrata for Serum-Free Animal Cell Culture</i> , Barnes, D.W., <i>et al.</i> , eds., Alan R. Liss, Inc., New York, NY, pp. 23-68 (1984)				
Jeu	AT	21	Wille Jr., J.J., <i>et al.</i> , "Integrated Control of Growth and Differentiation of Normal Human Prokeratinocytes Cultured in Serum-Free Medium: Clonal Analyses, Growth Kinetics, and Cell Cycle Studies," <i>J. Cell. Physiol.</i> 121:31-44 (1984)				
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							



FORM PTO-1449

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.4110002APPLICATION NO.
09/028,514APPLICANT
Gorfien et al.FILING DATE
February 23, 1998GROUP
1651

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>Dea</i>	AR	22	Letter from an outside researcher not employed by Life Technologies, Inc. to David Epstein and Dale Gruber
<i>Dea</i>	AS	22	Letter from David Epstein and Dale Gruber to an outside researcher not employed by Life Technologies, Inc.
<i>Dea</i>	AT	22	Report of experimental results from an outside researcher not employed by Life Technologies, Inc. to David Epstein and Dale Gruber

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.